

WHAT IS CLAIMED IS:

1. A nucleic acid encoding a polypeptide product comprising a first and second chromo/fluorescent domain, optionally joined by a linking domain,
5 wherein said first and second chromo/fluorescent domains associate with each other under intracellular conditions so that said encoded polypeptide assumes a tertiary structure.
2. The nucleic acid according to Claim 1, wherein said first and second
10 chromo/fluorescent domains are oligomeric producing domains.
3. The nucleic acid according to Claim 2, wherein said chromo/fluorescent domains are chromo-or fluorescent proteins from a Cnidarian species or mutants of chromo-or fluorescent proteins from a Cnidarian species.
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4. The nucleic acid according to Claim 3, wherein said Cnidarian species is a non-bioluminescent Cnidarian species.
5. The nucleic acid according to Claim 4, wherein said non-bioluminescent
20 Cnidarian species is an Anthozoan species.
6. The nucleic acid according to Claim 1, wherein said nucleic acid encodes a fusion protein of said first and second chromo/fluorescent domains fused to a non-chromo/fluorescent protein domain.
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7. A construct comprising a vector and a nucleic acid according to Claim 1.
8. An expression cassette comprising:
 - (a) a transcriptional initiation region functional in an expression host;
 - 30 (b) a nucleic acid according to Claim 1; and
 - (c) a transcriptional termination region functional in said expression host.

9. A cell, or the progeny thereof, comprising an expression cassette according to Claim 8 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell.

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10. A method of producing a polypeptide product comprising a first and second chromo/fluorescent domain, said method comprising:
growing a cell according to Claim 9, whereby said polypeptide product is expressed.

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11. A protein or fragment thereof encoded by a nucleic acid according to Claim 1.

12. An antibody binding specifically to a protein according to Claim 11.

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13. A transgenic cell or the progeny thereof comprising a transgene that is a nucleic acid according to Claim 1.

14. A transgenic organism comprising a transgene that is a nucleic acid according to Claim 1.

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15. In an application that employs a chromo- or fluorescent protein, the improvement comprising:
employing a protein according to Claim 11.

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16. In an application that employs a nucleic acid encoding a chromo- or fluorescent protein, the improvement comprising:
employing a nucleic acid according to Claim 1.

30 17. A kit comprising a nucleic acid according to Claim 1.